

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-20 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Regarding claims 1, 19, and 10, the female element fashioned from a flexible fiber construction was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The description of the female element is extremely vague and lacks numerous critical details required to make the device. It is not clear how the female element exactly is constructed from fibers and what exactly are the electrical components. It is not clear what exactly the "contact area 23" is or how it structurally relates to the female element 20 which is purportedly made of fiber. As best understood by the examiner, the female component is a pocket of cloth or fiber material holding some kind of connector 23. Likewise for the male element, numerous details are lacking as to what the device is or how it is constructed. For example in figure 1, it is unclear what the "hub 12" is or does or what the "controller 16" is or does or how these elements relate to the contact area 23. Furthermore, regarding

claims 2-5, the contact members pivotally cooperable with the hub members were not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is not disclosed how the contact members are structured with relation to the controller and the hub. It is not disclosed how the contact members are made to pivot or how they are constructed or what their structure is in relation to the controller and hub. Nevertheless, the claims are analyzed on the merits.

Claim Rejections - 35 USC § 102 and 35 USC § 103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the anticipatory rejections under 35 U.S.C. 102 made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in —

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a);

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and

the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Furey et al. ("Furey") in view of Kamijo. Regarding claim 1, Furey discloses an interconnect comprising at least one male element (11) having one or more contact members (20); and at least one female element (7, 12, 9) having one or more contact areas (15), wherein said at least one female element is fashioned from a flexible construction. The Furey female element is not disclosed as being fashioned from a fiber construction. Kamijo discloses a flexible fiber construction (400, 500). At the time of the invention, it would have been obvious to use the Furey connectors with the Kamijo fabric (400, 500) such as by replacing the foam/foil of Furey with the fabric (400, 500) of Kamijo (the "female element" would then include the female connector 12 of Furey and the fabric (400, 500) of Kamijo). Alternatively at the time of the invention, it would have been obvious to replace some or all of the Kamijo clips (e.g. 902, 904, 911, 912, 914, 915) with the Furey connectors (11, 12) such as by attaching the Furey connector 12 to the Kamijo garments. The "female element" would then include the Furey connector 12 and the Kamijo garments as shown in Kamijo figure 9. The suggestion or motivation for doing so would have been to easily and securely connect devices to the Kamijo garment, such motivation being well known in the art. One of ordinary skill in the art could have combined the elements by known methods and each element would have performed the same function as it did separately. One of ordinary skill would have

recognized that the results of the combination were predictable. KSR International Co. v. Teleflex Inc., 82 USPQ.2d 1385 (2007).

Per claim 2, one or more contact members (20a, 20b) pivotally cooperate with at least one hub member (27a, 27b).

Per claim 3 said one or more contact members can cooperate with said one or more contact areas (15a, 15b) of said at least one female element.

Per claim 4 said at least one hub member (27) has a controller (18) for cooperating with said one or more contact members.

Per claim 5 said controller controls the pivotal positioning of said one or more contact members.

Per claim 6 as best understood given the lack of enabling disclosure regarding the invention, said fiber construction (including fabric 400, 500, of Kamijo and connector 12 of Furey) of said at least one female element forms a socket with said one or more contact areas being situated therein. Alternatively, at the time of the invention, it would have been obvious to locate the Furey connector 12 at various locations on the Kamijo garment, including within a pocket of the garment such as the pocket shown enclosing clip 915 (thus the fiber pocket of the garment forms the fiber construction female element). The suggestion or motivation for doing so would have been to easily and securely connect devices to the Kamijo garment, such motivation being well known in the art.

Per claim 7, said one or more contact members are electrically and/or mechanically connectable with said socket and/or said one or more contact areas.

Per claim 8, Kamijo discloses a garment.

Per claim 9 said socket of said at least one female element and said one or more contact members of said at least one male element are electrically and/or mechanically connectable with any of a variety of electronic devices/systems

Claims 10-20 are rejected for the reasons pertaining to claims 1-9.

Response to Arguments

Applicant's arguments have been considered. Regarding the 35 USC 112 first paragraph rejections, applicant quotes verbatim paragraphs of the specification. The examiner has read the entire specification and the rejections are based on consideration of the entire specification.

Regarding Furey, applicant argues that Furey does not disclose a female element fashioned from a flexible connection. The examiner disagrees. The foam and foil elements are flexible and part of the female element.

Regarding the flexible fiber, Kamijo is cited for teaching flexible fiber.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ross Gushi whose telephone number is (571) 272-2005. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Paula A. Bradley, can be reached at 571-272-2800 extension 33. The phone number for the Group's facsimile is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Ross N. Gushi/

Primary Examiner, Art Unit 2833